

IN THE CLAIMS:

Please **AMEND** the claims as follows:

1. (Currently Amended) A method of identifying a data stream in a digital television receiver, comprising:

obtaining a locator adapted for identifying a multicast IP data stream;

associating the locator with one of a plurality of multicast IP data streams, each one of the plurality of multicast IP data streams being associated with one of a plurality of television channels;

allocating an IP address at the receiver; and

mapping the locator to ~~an~~ the IP address by the receiver, thereby enabling a tuner to read the one of the plurality of multicast IP data streams associated with the locator, wherein a first set of one or more IP addresses identifies one or more network interface cards and a second set of one or more IP addresses is associated with one or more locators such that the second set of one or more IP addresses identifies one or more of the plurality of multicast IP data streams;

reading one of the plurality of data streams identified by an IP address by a tuner upon determination that the IP address corresponds to a locator identifying a multicast IP data stream; and

reading data from a network by a network interface card identified by an IP address upon determination that the IP address does not correspond to a locator identifying a multicast IP data stream.

2. (Currently Amended) The method as recited in claim 1, wherein allocating the IP address by the receiver comprises: ~~further comprising:~~

generating the IP address by the receiver from a set of private IP addresses reserved for use in private networks prior to mapping the locator to the IP address by the receiver.

3. (Previously Amended) The method as recited in claim 1, wherein obtaining a locator comprises:

instantiating a locator object.

4. (Original) The method as recited in claim 3, further comprising:
garbage collecting the locator object when it is no longer used.
5. (Previously Amended) The method as recited in claim 1, wherein each one of the plurality of multicast IP data streams is associated with the same one of the plurality of television channels associated with a single multicast group address.
6. (Previously Amended) The method as recited in claim 3, wherein the plurality of multicast IP data streams are associated with two or more of the plurality of television channels.
7. (Previously Amended) The method as recited in claim 1, wherein each one of the plurality of multicast IP data streams is associated with a single tuner.
8. (Previously Amended) The method as recited in claim 1, wherein the plurality of multicast IP data streams are associated with two or more tuners.
9. (Currently Amended) The method as recited in claim 1, wherein allocating the IP address at the receiver comprises ~~further comprising~~:
allocating a private IP address at the receiver to be mapped to the locator, wherein mapping the locator to an IP address includes mapping the locator to the private IP address.
10. (Currently Amended) A method of selecting a data stream in a digital television receiver, comprising:
obtaining a data stream locator associated with a multicast IP data stream;
providing the data stream locator to an interface map, the interface map being adapted for mapping one or more data stream locators to one or more private IP addresses allocated for use in identifying data stream locators; and
receiving ~~an~~ a private IP address associated with the data stream locator from the interface map, wherein a first set of IP addresses including the private IP address is associated with one or more data stream locators such that the first set of IP addresses identifies one or more multicast IP data streams associated with one or more television channels and a second

set of IP addresses identifies one or more network interface cards, thereby enabling one or more tuners to read the data streams associated with the first set of IP addresses and enabling the network interface cards identified by the IP addresses to read data from a network.

11. (Currently Amended) A method of selecting a data stream in a digital television receiver, comprising:

obtaining an IP address;

determining whether the IP address is a private IP address previously allocated by the digital television receiver to identify ~~corresponds to~~ a data stream locator associated with a multicast IP data stream; and

when it is determined that the IP address is a private IP address previously allocated by the digital television receiver to identify ~~corresponds to~~ a data stream locator associated with a multicast IP data stream, reading the multicast IP data stream associated with the data stream locator by a tuner; and

when it is determined that the IP address is not a private IP address previously allocated by the digital television receiver to identify ~~does not correspond to~~ a data stream locator associated with a multicast IP data stream, reading data from a network by a network interface card identified by the IP address.

12. (Previously Amended) The method as recited in claim 11, further comprising:
instructing the tuner to read the multicast IP data stream associated with the data stream locator.

13. (Previously Amended) The method as recited in claim 12, wherein instructing the tuner to read the multicast IP data stream associated with the data stream locator comprises instructing a tuner that is tuned to a multicast group address associated with the multicast IP data stream to read the data stream associated with the data stream locator.

14. (Previously Amended) The method as recited in claim 12, wherein instructing the tuner to read the multicast IP data stream associated with the data stream locator comprises instructing a tuner that is currently unused to read the multicast IP data stream associated with the data stream locator.

15. (Currently Amended) The method as recited in claim 11, further comprising releasing the IP private address for future use when the IP address is no longer being used and the IP private address corresponds to a data stream locator associated with a multicast IP data stream.

16. (Currently Amended) The method as recited in claim 11, wherein determining whether the IP address is a private IP address previously allocated by the digital television receiver to identify ~~corresponds to~~ a data stream locator associated with a multicast IP data stream is performed by an interface map responsible for mapping one or more locator objects to one or more IP addresses, each one of the locator objects being associated with a multicast IP data stream, the method further comprising:

instructing the interface map to release the private IP address for future use when the private IP address is no longer being used and the private IP address corresponds to a data stream locator associated with a multicast IP data stream.

17. (Cancelled)

18. (Cancelled)

19. (Currently Amended) A method of selecting multicast IP data transmitted in broadcast streams, comprising:

obtaining an IP address;

determining whether the IP address is a private IP address previously allocated by the digital television receiver to identify ~~corresponds to~~ a data stream locator associated with a multicast IP data stream;

specifying a multicast group address associated with the IP address;

when it is determined that the IP address is a private IP address previously allocated by the digital television receiver to identify ~~corresponds to~~ a data stream locator associated with a multicast IP data stream, instructing a tuner to read the multicast IP data stream associated with the data stream locator and to receive packets in the multicast IP data stream that are addressed to the multicast group address; and

when it is determined that the IP address is not a private IP address previously allocated by the digital television receiver to identify ~~does not correspond to~~ a data stream

locator associated with a multicast IP data stream, instructing a network card identified by the IP address to listen to the multicast group address.

20. (Original) The method as recited in claim 19, further comprising:
receiving packets addressed to the multicast group address.

21. (Currently Amended) A method of selecting multicast IP data transmitted in broadcast streams, comprising:

obtaining an IP address, the IP address being mapped to an associated data stream locator identifying a multicast IP data stream associated with a television channel;

determining that the IP address is a private IP address previously allocated by the digital television receiver that is mapped to a data stream locator identifying a multicast IP data stream associated with a television channel;

specifying a multicast group address associated with the multicast IP data stream; and
instructing a tuner to read the data stream associated with the data stream locator and to receive packets in the multicast IP data stream that are addressed to the multicast group address when it is determined that the IP address is a private IP address previously allocated by the digital television receiver that is mapped to a data stream locator identifying a multicast IP data stream associated with a television channel.

22. (Cancelled)

23. (Cancelled)

24. (Currently Amended) A computer-readable medium storing thereon computer-readable instructions for identifying a data stream in a digital television receiver, comprising:

instructions for obtaining a locator adapted for identifying a multicast IP data stream;

instructions for associating the locator with one of a plurality of multicast IP data streams, each one of the plurality of multicast IP data streams being associated with one of a plurality of television channels;

allocating an IP address at the receiver; and

instructions for mapping the locator to ~~an~~ the IP address at the receiver, thereby enabling a tuner to read the one of the plurality of multicast IP data streams associated with

the locator, wherein a first set of one or more IP addresses identifies one or more network interface cards and a second set of one or more IP addresses is associated with one or more locators such that the second set of one or more IP addresses identifies one or more of the plurality of multicast IP data streams;

instructions for reading one of the plurality of data streams identified by an IP address by a tuner upon determination that the IP address corresponds to a locator identifying a multicast IP data stream; and

instructions for reading data from a network by a network interface card identified by an IP address upon determination that the IP address does not correspond to a locator identifying a multicast IP data stream.

25. (Currently Amended) An apparatus for identifying a data stream in a digital television receiver, comprising:

means for obtaining a locator adapted for identifying a multicast IP data stream;

means for associating the locator with one of a plurality of multicast IP data streams, each one of the plurality of multicast IP data streams being associated with one of a plurality of television channels;

allocating an IP address at the receiver; and

means for mapping the locator to ~~an~~ the IP address at the receiver, thereby enabling a tuner to read the one of the plurality of multicast IP data streams associated with the locator, wherein a first set of one or more IP addresses identifies one or more network interface cards and a second set of one or more IP addresses is associated with one or more locators such that the second set of one or more IP addresses identifies one or more of the plurality of multicast IP data streams;

means for reading one of the plurality of data streams identified by an IP address by a tuner upon determination that the IP address corresponds to a locator identifying a multicast IP data stream; and

means for reading data from a network by a network interface card identified by an IP address upon determination that the IP address does not correspond to a locator identifying a multicast IP data stream.

26. (Currently Amended) An apparatus for identifying a data stream in a digital television receiver, comprising:

a processor; and

a memory, at least one of the processor and the memory being adapted for:

obtaining a locator adapted for identifying a multicast IP data stream;

associating the locator with one of a plurality of multicast IP data streams,

each one of the plurality of multicast IP data streams being associated with one of a plurality of television channels;

allocating an IP address at the receiver; and

mapping the locator to an IP address at the receiver, thereby enabling a tuner to read the one of the plurality of multicast IP data streams associated with the locator, wherein a first set of one or more IP addresses identifies one or more network interface cards and a second set of one or more IP addresses is associated with one or more locators such that the second set of one or more IP addresses identifies one or more of the plurality of multicast IP data streams;

reading one of the plurality of data streams identified by an IP address by a tuner upon determination that the IP address corresponds to a locator identifying a multicast IP data stream; and

reading data from a network by a network interface card identified by an IP address upon determination that the IP address does not correspond to a locator identifying a multicast IP data stream.

Please **ADD** new claims as follows:

27. (New) A method of identifying a data stream in a digital television receiver, comprising:

allocating a private IP address by the receiver for use in identifying a multicast IP data stream; and

mapping the allocated IP address by the receiver to one of a plurality of multicast IP data streams, each one of the plurality of multicast IP data streams being associated with one of a plurality of television channels, thereby enabling a tuner to read the one of the plurality of multicast IP data streams associated with the allocated IP address, wherein a first set of one or more IP addresses identifies one or more network interface cards and a second set of one or more IP addresses is associated with one or more multicast IP data streams such that the second set of one or more IP addresses identifies one or more of the plurality of multicast

IP data streams;

reading one of the plurality of data streams identified by an IP address by a tuner upon determination that the IP address corresponds to a multicast IP data stream; and

reading data from a network by a network interface card identified by an IP address upon determination that the IP address does not correspond to a multicast IP data stream.

28. (New) A method of selecting a data stream in a digital television receiver, comprising:

obtaining a private IP address associated with a multicast IP data stream;

providing the private IP address to an interface map, the interface map being adapted for mapping one or more multicast IP data streams to one or more private IP addresses allocated by the digital television receiver for use in identifying multicast IP data streams; and

receiving a private IP address associated with the multicast IP data stream from the interface map, wherein a first set of IP addresses including the private IP address is associated with one or more multicast IP data streams such that the first set of IP addresses identifies one or more multicast IP data streams associated with one or more television channels and a second set of IP addresses identifies one or more network interface cards, thereby enabling one or more tuners to read the data streams associated with the first set of IP addresses and enabling the network interface cards identified by the IP addresses to read data from a network.

29. (New) A method of selecting a data stream in a digital television receiver, comprising:

obtaining an IP address;

determining whether the IP address is a private IP address previously allocated by the digital television receiver to identify a multicast IP data stream; and

when it is determined that the IP address is a private IP address previously allocated by the digital television receiver to identify a multicast IP data stream, reading the multicast IP data stream associated with the IP address by a tuner; and

when it is determined that the IP address is not a private IP address previously allocated by the digital television receiver to identify a multicast IP data stream, reading data from a network by a network interface card identified by the IP address.

30. (New) A method of selecting multicast IP data transmitted in broadcast streams, comprising:

obtaining an IP address;

determining whether the IP address is a private IP address previously allocated by the digital television receiver to identify a multicast IP data stream;

specifying a multicast group address associated with the IP address;

when it is determined that the IP address is a private IP address previously allocated by the digital television receiver to identify a multicast IP data stream, instructing a tuner to read the multicast IP data stream associated with the private IP address and to receive packets in the multicast IP data stream that are addressed to the multicast group address; and

when it is determined that the IP address is not a private IP address previously allocated by the digital television receiver to identify a multicast IP data stream, instructing a network card identified by the IP address to listen to the multicast group address.

31. (New) A method of selecting multicast IP data transmitted in broadcast streams, comprising:

obtaining an IP address, the IP address being mapped to a multicast IP data stream associated with a television channel;

determining that the IP address is a private IP address previously allocated by the digital television receiver that is mapped to a multicast IP data stream associated with a television channel;

specifying a multicast group address associated with the multicast IP data stream; and

instructing a tuner to read the data stream associated with the IP address and to receive packets in the multicast IP data stream that are addressed to the multicast group address when it is determined that the IP address is a private IP address previously allocated by the digital television receiver that is mapped to a multicast IP data stream associated with a television channel.